

**NEW YORK** 

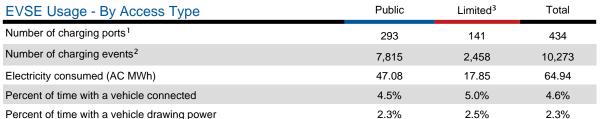
STATE OF OPPORTUNITY.

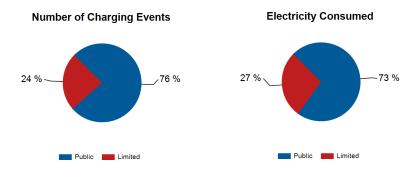
**NYSERDA** 

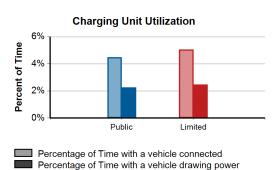
### NYSERDA Electric Vehicle Charging Infrastructure Report

Report period: April 2015 through June 2015

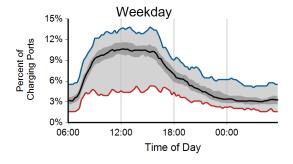
New York State

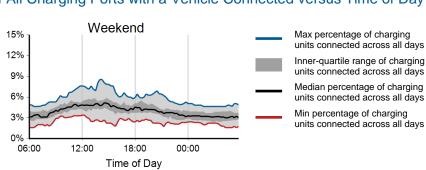




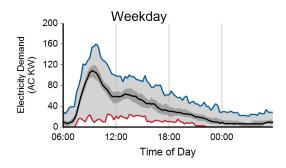


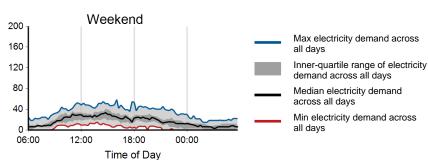
#### Charging Availability: Range of Percentage of All Charging Ports with a Vehicle Connected versus Time of Day<sup>4</sup>





#### Charging Demand: Range of Aggregate Electricity Demand versus Time of Day<sup>4</sup> for All Charging Ports





<sup>&</sup>lt;sup>1</sup> Includes all EVSE ports in use during the reporting period and have reported data to INL.

<sup>&</sup>lt;sup>4</sup> Weekends start at 6:00am on Saturday and end 6:00am Monday local time.



<sup>&</sup>lt;sup>2</sup> A charging event is defined as the period when a vehicle is connected to a charging unit, during which power is transferred.

<sup>&</sup>lt;sup>3</sup> Limited Access EVSE are primarily for use by employees or tenants (including paying guests at hotels) and are placed where these EV drivers would normally park, but others (such as visitors or customers) may be able to plug in on a more limited basis.



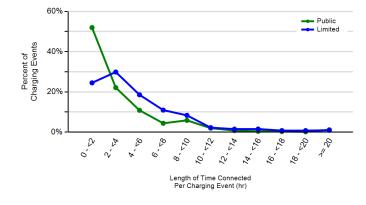
## NYSERDA Electric Vehicle Charging Infrastructure Report

Report period: April 2015 through June 2015



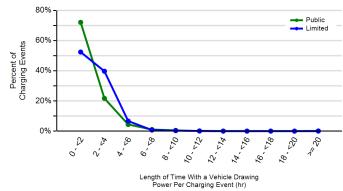
EVSE Usage - By Access Type	Public	Limited <sup>3</sup>
Number of charging ports <sup>1</sup>	293	141
Number of charging events <sup>2</sup>	7,815	2,458
Charging energy consumed (AC MWh)	47.1	17.9
Average percent of time with a vehicle connected per charging port	4.5%	5.0%
Average percent of time with a vehicle drawing power per charging port	2.3%	2.5%
Average number of charging events started per charging port per week	2.1	1.5
Average electricity consumed per charging port per week (AC KWh)	12.6	10.9
Average length of time with vehicle connected per charging event (hr)	3.6	5.6
Average length of time with vehicle drawing power per charging event (hr)	1.8	2.8
Average electricity consumed per charging event (AC kWh)	6.0	7.3

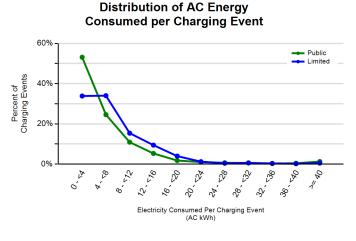
## Distribution of Length of Time with a Vehicle Connected per Charging Event

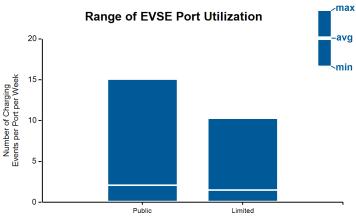


## Vehicle Drawing Power per Charging Event

Distribution of Length of Time with a







 $<sup>^{\</sup>mathrm{1}}$  Includes all EVSE ports in use during the reporting period and have reported data to INL.

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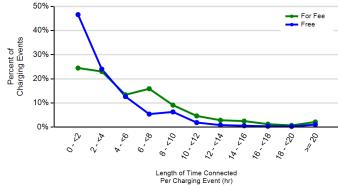
## NYSERDA Electric Vehicle Charging Infrastructure Report

Report period: April 2015 through June 2015

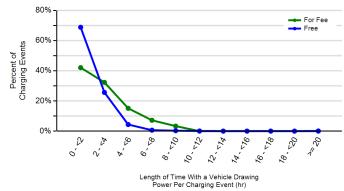


EVSE Usage - By Required Payment	For Fee	Free
Number of charging ports <sup>1</sup>	65	369
Number of charging events <sup>2</sup>	560	9,713
Charging energy consumed (AC MWh)	7.3	57.6
Average percent of time with a vehicle connected per charging port	2.5%	5.0%
Average percent of time with a vehicle drawing power per charging port	1.1%	2.5%
Average number of charging events started per charging port per week	0.7	2.1
Average electricity consumed per charging port per week (AC KWh)	8.8	12.7
Average length of time with vehicle connected per charging event (hr)	6.2	4.0
Average length of time with vehicle drawing power per charging event (hr)	2.9	2.0
Average electricity consumed per charging event (AC kWh)	13.1	5.9

#### Distribution of Length of Time with a Vehicle Connected per Charging Event

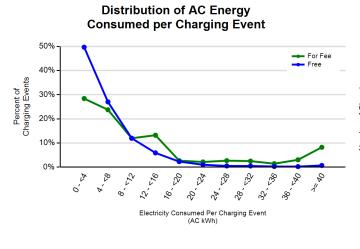


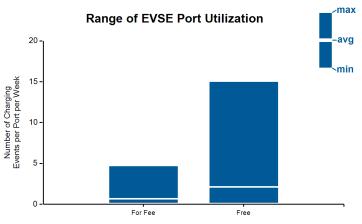
# 80%



Distribution of Length of Time with a

Vehicle Drawing Power per Charging Event





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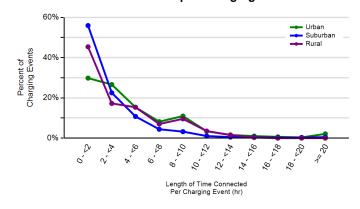
## NYSERDA Electric Vehicle Charging Infrastructure Report

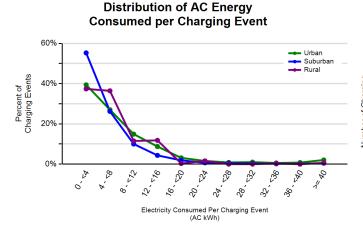
Report period: April 2015 through June 2015



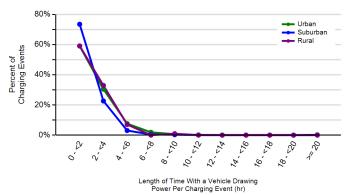
EVSE Usage - By Land Use Type	Urban	Suburban	Rural
Number of charging ports <sup>1</sup>	168	231	35
Number of charging events <sup>2</sup>	4,024	5,936	313
Charging energy consumed (AC MWh)	32.2	30.7	2.0
Average percent of time with a vehicle connected per charging port	6.3%	3.9%	1.5%
Average percent of time with a vehicle drawing power per charging port	2.8%	2.2%	0.8%
Average number of charging events started per charging port per week	1.9	2.1	0.7
Average electricity consumed per charging port per week (AC KWh)	15.3	10.9	4.5
Average length of time with vehicle connected per charging event (hr)	5.6	3.1	3.6
Average length of time with vehicle drawing power per charging event (hr)	2.4	1.8	1.9
Average electricity consumed per charging event (AC kWh)	8.0	5.2	6.5

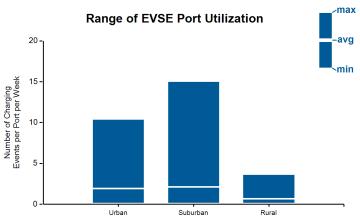
## Distribution of Length of Time with a Vehicle Connected per Charging Event





# Distribution of Length of Time with a Vehicle Drawing Power per Charging Event





 $<sup>^{\</sup>mathrm{1}}$  Includes all EVSE ports in use during the reporting period and have reported data to INL.



<sup>&</sup>lt;sup>2</sup> A charging event is defined as the period when a vehicle is connected to a charging unit, during which power is transferred.



#### NYSERDA Electric Vehicle Charging Infrastructure Report **NEW YORK NYSERDA** STATE OF OPPORTUNITY. Report period: April 2015 through June 2015 Syracuse/Central Rochester/Finger Iohawk Valley Capital District Jew York City udson Valley Vorth Country Island estern NY -akes guc **EVSE Usage - By Region** ≽ 86 55 54 101 34 10 21 48 Number of charging ports 19 1,016 997 264 67 964 3,861 1,350 295 1,318 Number of charging events<sup>2</sup> Charging energy consumed (AC MWh) 12.6 7.0 7.0 18.7 1.5 6.9 0.3 1.3 8.3 Average percent of time with a vehicle connected per charging port 4.7% 5.0% 5.6% 4.9% 1.7% 7.0% 0.5% 1.2% 4.4% Average percent of time with a vehicle drawing power per charging port 2 2% 2.0% 3.2% 2.5% 1.2% 3.1% 0.4% 0.8% 2.2% 0.9 1.8 1.5 3.0 1.1 3.1 0.6 2.1 Average number of charging events started per charging port per week 1.1 12.3 10.8 16.1 2.5 Average electricity consumed per charging port per week (AC KWh) 116 14.4 6.1 4.9 13.4 Average length of time with vehicle connected per charging event (hr) 8.8 4.7 6.1 2.8 2.6 3.8 14 1.8 3.5 Average length of time with vehicle drawing power per charging event (hr) 4.2 1.9 3.5 1.4 1.9 1.7 1.3 1.2 1.8

13.1

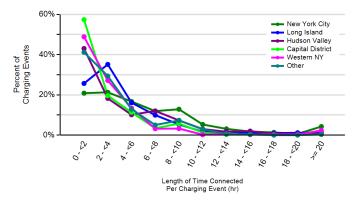
6.9

7.0

4.8

## Distribution of Length of Time with a Vehicle Connected per Charging Event<sup>4</sup>

Average electricity consumed per charging event (AC kWh)



# Distribution of Length of Time with a Vehicle Drawing Power per Charging Event

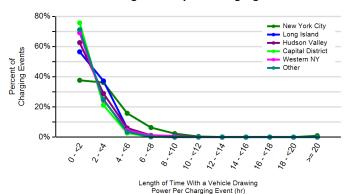
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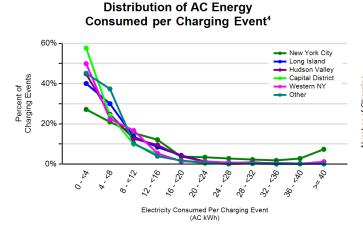
4.5

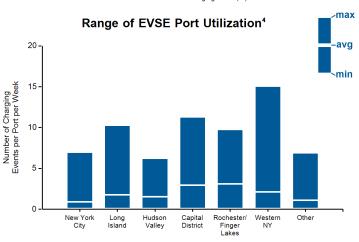
4.3

6.3

5.5







<sup>&</sup>lt;sup>1</sup> Includes all EVSE ports in use during the reporting period and have reported data to INL.

<sup>&</sup>lt;sup>4</sup> Only 5 or 6 regions with the most EVSE ports are individually represented, with the remaining regions combined and shown as 'Other'.



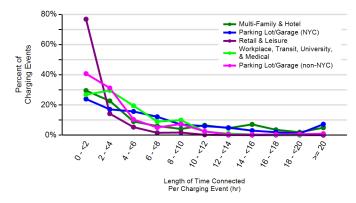
<sup>&</sup>lt;sup>2</sup> A charging event is defined as the period when a vehicle is connected to a charging unit, during which power is transferred.

<sup>&</sup>lt;sup>3</sup> Regions with less than 10 EVSE ports are not individually represented, and are combined and reported as 'Other'.

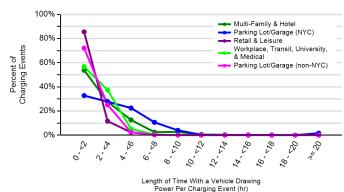


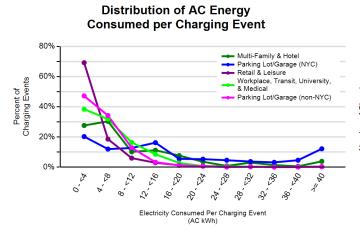
#### NYSERDA Electric Vehicle Charging Infrastructure Report **NEW YORK NYSERDA** STATE OF OPPORTUNITY. Report period: April 2015 through June 2015 Parking Lot/Garage Parking Lot/Garage eisure Destination **Jedical Campus** Retail Location ansit Station Iniversity or **Aulti-Family** non-NYC) Norkplace (NYC) otel EVSE Usage - By Venue 52 68 62 28 94 21 19 Number of charging ports 73 15 148 1,813 568 2,754 1,163 218 2,926 560 114 Number of charging events<sup>2</sup> Charging energy consumed (AC MWh) 9.4 10.0 10.6 7.4 1.9 2.0 20.0 3.0 0.6 Average percent of time with a vehicle connected per charging port 6.3% 4.5% 2.2% 4.6% 2.4% 6.9% 1.4% Average percent of time with a vehicle drawing power per charging port 2.7% 2.3% 1.8% 2.9% 1.3% 0.9% 3.4% 2.0% 0.5% 2.8 0.7 3.0 0.8 0.6 2.8 2.1 0.5 Average number of charging events started per charging port per week 1.4 10.7 5.5 19.0 Average electricity consumed per charging port per week (AC KWh) 14.5 11.6 11.4 92 10.8 27 Average length of time with vehicle connected per charging event (hr) 3.8 114 1.2 6.6 9.4 6.8 4.2 3.0 4.5 Average length of time with vehicle drawing power per charging event (hr) 1.6 5.8 1.0 3.4 2.6 2.4 2.0 1.6 1.7 Average electricity consumed per charging event (AC kWh) 5.2 17.5 3.8 6.4 13.0 9.2 6.9 5.3 5.3

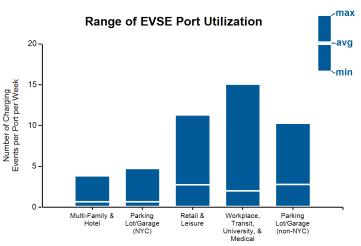
## Distribution of Length of Time with a Vehicle Connected per Charging Event



#### Distribution of Length of Time with a Vehicle Drawing Power per Charging Event







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